ORIGINAL TO GENERAL FILES

D.O.T. 66

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE BRST-189-1(30) Gwinnett County
P. I. No. 132986

OFFICE Preconstruction

DATE February 11, 2003

FROM Margaret B. Pirkle, P.E., Assistant Director of Preconstruction

TO SEE DISTRIBUTION

SUBJECT PROJECT CONCEPT REPORT APPROVAL

Attached for your files is the approval for subject project.

MBP/cj

Attachment

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D.O.T. 66

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE: BRST-189-1(30) Gwinnett County
P.I. No. 132986

OFFICE Preconstruction

DATE January 22, 2003

FROM Margaret B. Pirkle, P.E., Assistant Director of Preconstruction

TO Frank L. Danchetz, P.E., Chief Engineer

SUBJECT PROJECT CONCEPT REPORT

This project is the replacement of a structurally deficient bridge on SR 120/Duluth Highway over Singleton Creek, 1.5 miles east of Duluth, Georgia. The existing bridge, constructed in 1938, is load limited with a sufficiency rating of 59. The original design load capacity is H-15. In accordance with DOT MOG 2405-1, the existing bridge meets the established criteria for replacement. State Route 120 at this location is a rural two lane roadway with 12' travel lanes with rural shoulders. Traffic is projected to be 28,650 VPD and 49,500 VPD in the years 2009 and 2029 respectively. The posted speed is 50 MPH and the design speed is 55 MPH.

The construction proposes to relocate SR 120 south of its present location, extending a total of 0.38 mile. The proposed new bridge will be 120' x 58' and will be located just south of the existing bridge structure. The relocated SR 120 will consist of two, 12' lanes with 10' rural shoulders (2' paved). A 14' westbound left turn lane will be included on the bridge and the western approach. Traffic will be maintained on the existing bridge while the proposed bridge is constructed.

Environmental concerns include requiring a COE 404 Permit; a Categorical Exclusion will be prepared; time saving procedures are appropriate.

This project will require split funding because the sufficiency rating exceeds 50. "BR" funding will cover the amount equal to the widening and the remainder will consist of "STP" funding.

The estimated costs for this project are:

	PROPOSED	APPROVED	PROG DATE	LET DATE
Construction (includes E&C	**BR** $1,548,000	**BR** $772,000		
and inflation)	**STP** $ 589,000	**STP** $772,000	2007	2007
Right-of-Way	$ 408,000	$ 10,000		
Utilities*	$ 25,000	-----		

~~*LGPA sent 7-19-99 requesting Gwinnett County do utilities.~~

This project is in the STIP. I recommend this project concept be approved.

MBP:JDQ/cj

Attachment

CONCUR _____
Thomas L. Turner, P.E., Director of Preconstruction

APPROVE _____
Frank L. Danchetz, P.E., Chief Engineer

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
OFFICE OF CONSULTANT DESIGN

PROJECT CONCEPT REPORT

Project Number: BRST-189-1(30)
County: Gwinnett
P.I. Number: 132986

Federal Route Number: N/A
State Route Number: 120

Recommendation for approval:

DATE 7/23/02 _____ Project Manager

DATE 8/5/02 _____ State Consultant Design Engineer

The concept as presented herein and submitted for approval is consistent with that which is included in the Regional Transportation Plan (RTP) and/or the State Transportation Improvement Program (STIP).

DATE _____ State Transportation Planning Administrator

DATE _____ Office of Financial Management Administrator

DATE _____ State Environmental / Location Engineer

DATE _____ State Traffic Safety and Design Engineer

DATE _____ District Engineer

DATE _____ Project Review Engineer

DATE _____ State Bridge & Structural Design Engineer

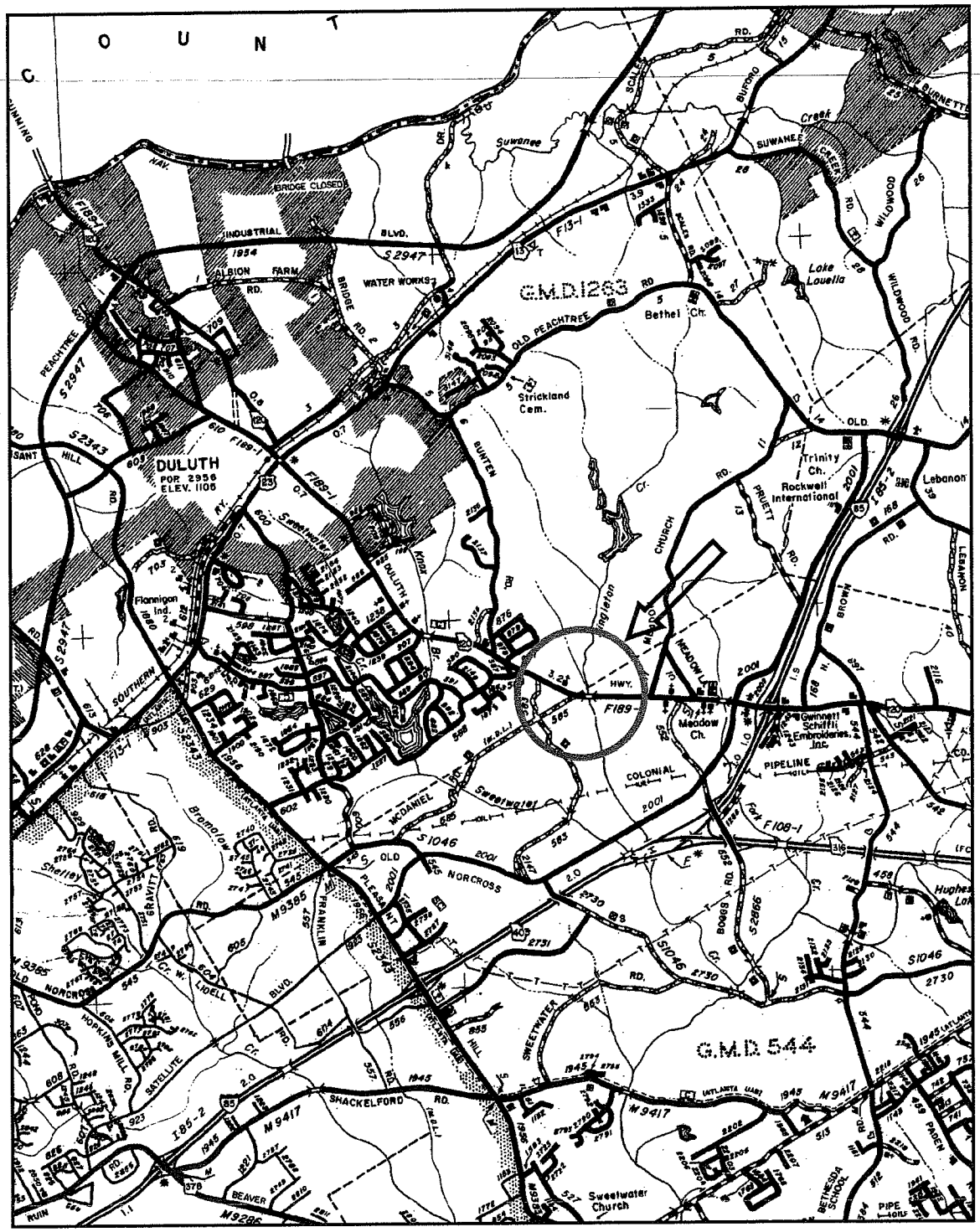
SCORING RESULTS AS PER MOG 2440-2

Project Number:	County:	PI No.:
BRST-189-1(30)	Gwinnett	132986

Report Date:	Concept By:
July 23, 2002	DOT Office: Consultant Design
☒ Concept Stage	Consultant: Transportation Systems Design, Inc.

Project Type: Choose One From Each Column			
	☐ Major	☒ Urban	☐ ATMS
	☒ Minor	☐ Rural	☒ Bridge Replacement
			☐ Building
			☐ Interchange Reconstruction
			☐ Intersection Improvement
			☐ Interstate
			☐ New Location
			☐ Widening & Reconstruction
			☐ Miscellaneous

FOCUS AREAS	SCORE	RESULTS
Presentation	100	
Judgement	90	CR 585 intersection realignment should be considered. May not need the 14' turn lane on the bridge. Culvert design should also be evaluated to determine if it is feasible and more cost effective.
Environmental	100	
Right of Way	100	
Utility	100	
Constructability	100	
Schedule	100	



Scale: 1 inch = 1 mile

N

Location Map

Project: BRST-189-1(30) Gwinnett County **PI No.:** 132986-
Description: SR 120 over Singleton Creek 1.5 mi E of Duluth

NEED AND PURPOSE
PROJECT BRST-189-1(30), GWINNETT COUNTY
PI NO. 132986
BRIDGE REPLACEMENT

The proposed project would replace the existing State Route 120 bridge located over Singleton Creek between Northmont Parkway and Meadow Church Way. The existing bridge is in need of replacement due to a structural evaluation of a bridge supported by 10 inch H-Piles on the State Highway System. This bridge has been classified as structurally deficient due to load capacity and qualifies for federal BR funding. The bridge is also geometrically deficient with its narrow shoulders which pose a safety hazard. The bridge was constructed in 1958. It functions not only as a major connecting State Route, but also is a designated school bus route and supports transit buses as well. This project would replace the deficient structure with a bridge to meet the load limits and bring it up to current standards.

The purpose of this project is to correct bridge deficiency, serve the transportation demand generated by the increase in employment and through traffic, and improve the safety of the roadway.

The project (GW 290) is included in the approved State Transportation Improvement Program (FY 2002 – FY 2004) and the Transportation Improvement Program (FY 2002 – FY 2004) of the adopted Atlanta Regional Transportation Plan (FY2003 – FY 2025).

PROJECT CONCEPT REPORT

Description of the proposed project: *The proposed project would consist of replacing the existing bridge and approaches on SR 120 / Duluth Highway over Singleton Creek. The existing 2 lane bridge is 75 feet long and 24 feet wide and has 3 spans, each 25 feet in length. The proposed bridge will be 58 feet wide, consisting of two 12-foot lanes, a 14-foot westbound left turn lane, and two 10-foot shoulders. The proposed bridge, which will be constructed in stages, is expected to be approximately 120 feet in length and have 3 spans, each approximately 40 feet long. The proposed approaches would consist of two 12-foot lanes, a 14-foot westbound left turn lane, and two 10-foot shoulders, 2 feet of which will be paved. Additional right-of-way acquisition on both sides of the road is anticipated. The total length of bridge and approaches is approximately 2000 feet (0.38 miles).*

Is the project located in a Non-attainment area? __X__ **Yes** ____ **No**

PDP Classification: Major_____ Minor___X___

PDP Designation: Full Oversight ( ), Exempt (X), State Funded ( ), or Other ( )

Functional Classification: *Urban Minor Arterial*

U.S. Route Number(s): N/A **State Route Number(s):** 120

Traffic (AADT):

Current Year: (2001) 23,500 Base Year: (2009) 28,650 Design Year: (2029) 49,500

Existing design features:

- Typical Section: Two, 12' Lanes with grassed shoulders and ditches
- Posted Speed: 50 mph Maximum degree of curvature: N/A
- Maximum grade: 6.05% Mainline
- Width of right of way: Varies 80'-105'
- Major structures:
  - *75' x 24' bridge over Singleton Creek on State Route 120. Structure ID: 135-0023-0 Sufficiency rating: 59.7*
- Major interchanges or intersections along the project: "T" Intersection with Northmont Parkway, just west of the bridge
- Existing length of roadway segment: 0.38___

Proposed Design Features:

- Proposed typical section(s): *The proposed roadway will consist of two 12' lanes with 2' paved shoulder and 8' grassed shoulders with side slopes. A 14' westbound left turn lane will be included on the bridge and the western approach.*
- Proposed Design Speed Mainline: 55 mph
- Proposed Maximum grade Mainline: 5.5% Maximum grade allowable: 7.0%
- Proposed Maximum grade Side Street: *N/A* Maximum grade allowable: *N/A*
- Proposed Maximum grade driveway: 10% Maximum grade allowable: 15%
- Proposed Maximum degree of curve: 1°00'00" Maximum degree allowable: 5°15'00"
- Right of Way
  - Width: *Varies from existing to 200'*
  - Easements: Temporary( ), Permanent(X), Utility( ), Other( ).
  - Type of access control: Full( ), Partial( ), By Permit(X), Other( ).
  - Number of parcels: 10 Number of displacements:
    - Business: 0
    - Residences: 0
    - Mobile Homes: 0
    - Other: 0
- Structures:
  - Bridges: *The proposed bridge will be approximately 120' long and 58' wide.*
  - Retaining Walls: *None*
- Major intersections and interchanges: *"T" Intersection with Northmont Parkway, west of bridge*
- Traffic control during construction: *South half of new alignment bridge will serve two way traffic while remainder of wider bridge is built slightly south of previous location.*
- Design Exceptions to controlling criteria anticipated:

	UNDETERMINED	YES	NO
HORIZ ALIGNMENT:	( )	( )	(X)
ROADWAY WIDTH:	( )	( )	(X)
SHOULDER WIDTH:	( )	( )	(X)
VERTICAL GRADES	( )	( )	(X)
CROSS SLOPES:	( )	( )	(X)
STOPPING SIGHT DISTANCE:	( )	( )	(X)
SUPERELEVATION RATES:	( )	( )	(X)
HORIZONTAL CLEARANCE:	( )	( )	(X)
SPEED DESIGN:	( )	( )	(X)
VERTICAL CLEARANCE:	( )	( )	(X)
BRIDGE WIDTH:	( )	( )	(X)
BRIDGE STRUCTURAL CAPACITY:	( )	( )	(X)

- Design Variances: *None*
- Environmental Concerns: *Environmental study under way*
- Level of Environmental Analysis:
  - Are Time Saving Procedures Appropriate? Yes (X), No ( )
  - Categorical Exclusion Anticipated? Yes (X), No ( )
  - Environmental Assessment/Finding of No Significant Impact: Yes ( ), No (X)
  - Environmental Impact Statement (EIS): Yes ( ), No (X)

- Utility Involvements:
  - Telephone: *BellSouth*
  - Power: *Owner to be determined*
  - Water/Sewer: *Gwinnett County Public Utilities*
  - Cable TV: *Owner to be determined*

Project Responsibilities:

- Design: *Transportation Systems Design, Inc. (TSD)*
- Right of way acquisition: *GDOT*
- Relocation of utilities: *To be determined. LGPA requested 7-19-99.*
- Letting to contract: *GDOT*
- Supervision of construction: *GDOT*
- Providing material pits: *Contractor*
- Providing detours: *TSD, Inc. provides on site staging plan*

Coordination:

- Concept Meeting date(Minutes Attached): *June 5, 2002*
- P.A.R. meetings, dates, and results: *None anticipated*
- FEMA, USCG and/or TVA: *None anticipated*
- Public involvement: *None anticipated*
- Local government comments:
- Other projects in the area: *None*
- Other coordination to date: *None*

Scheduling – Responsible Parties' Estimate

Time to complete the environmental process:	6 Months
Time to complete preliminary construction plans:	4 Months
Time to complete right of way plans:	2 Months
Time to complete the section 404 permit:	3 Months
Time to complete final construction plans:	3 Months
Time to complete the purchase right-of-way:	9 Months
Other major items that will affect project schedule:	None

Other alternates considered:

Alternate 1 – *This alternate consists of replacing the existing bridge on existing location and constructing a temporary detour bridge to the south (downstream) of the existing bridge centerline to handle traffic. This alternate is discouraged because the temporary detour bridge will be designed for a 10-year storm and there is a risk of the detour bridge washing out and destroying the proposed bridge if a larger storm event occurs. This alternate would also impact overhead and underground utilities on the south side of the road, as well as the Northmont intersection.*

Alternate 2 – *Replace the bridge on existing location and provide an offsite detour. The potentially feasible off-site detour that exists would require a route utilizing Northmont Parkway, Evergreen Boulevard, Satellite Boulevard, and Boggs Road. Due to poor pavement condition of Evergreen Boulevard, this detour is not an option.*

Alternate 3 – *Replace existing bridge with culvert. Though the drainage area for this location is relatively small (approximately 3 square miles), the urban nature of the flow could potentially violate the no-rise condition. Therefore, this option is not recommended.*

Alternate 4 – *No build. Due to its narrow width and high daily traffic volumes, the bridge is unsafe and needs replacement.*

Comments: *It is recommended that we permanently realign SR 120 to the south of the existing bridge. It is also recommended that we add additional left turn capacity for Northmont Parkway. This will shift the existing SR 120 centerline to the south, and slightly flatten out the existing horizontal curve just west of the bridge. It will also widen the existing bridge width. This will likely impact the existing intersection with Northmont Parkway as well as introduce a slight broken back curve in an otherwise tangent roadway. Since the bridge will be constructed in stages, it will allow for maintenance of traffic during construction without an additional detour bridge. Overhead and underground utilities on the south side of the road will likely be impacted.*

Attachments:

1. Cost Estimate for selected option:
    a. Construction including E&C
    b. Right of Way, and
    c. Utilities.
2. Cost Estimate for "Widening Only" condition,
3. Sketch Location Map (in body of report),
4. Typical Sections,
5. Bridge Inventory,
6. Concept Meeting Minutes,
7. Location and Design Notice,
8. Preliminary Pavement Design (included on typical section)
9. Traffic Counts for Mainline,
10. Additional Traffic Counts for Left Turn Movement
11. Memo Regarding Bridge Replacement With Sufficiency Rating > 50

PRELIMINARY COST ESTIMATE

PROJECT NUMBER: BRST-1891(30) COUNTY: Gwinnett

DATE: January 20, 2003 ESTIMATED LETTING DATE: 2009

PREPARED BY: Transportation Systems Design, Inc PROJECT LENGTH: 0.38 Miles

( ) PROGRAMMING PROCESS ( ) CONCEPT DEVELOPMENT (X) DURING PROJECT DEV.

PROJECT COST			
A. RIGHT-OF-WAY:			
1. PROPERTY (LAND & EASEMENT) (Costs ranging $3.50-$5.00/SF)		$	388500
2. DISPLACEMENTS; RES: 0, BUS: 0, M.H.: 0		$	
3. OTHER COST (ADM./COST, INFLATION -- R/W DATE FOR PROJECT IS 2004)		$	19,425
SUBTOTAL: A		$	**407,925**
B. REIMBURSABLE UTILITIES:			
1. RAILROAD		$	
2. TRANSMISSION LINES		$	
3. SERVICES (utility poles)		$	25000
SUBTOTAL: B		$	**25,000**
C. CONSTRUCTION:			
1. MAJOR STRUCTURES			
a. BRIDGES (160' X 61.25X $86.25)			
(Includes additional 15% cost to stage construct)		$	845250
		$	
SUBTOTAL: C-1.a		$	845,250
b. OTHER			
		$	-
		$	
SUBTOTAL: C-1		$	**845,250**
2. GRADING AND DRAINAGE:			
a. EARTHWORK (Mainline)			
Borrow	CY @ $7.5	$	-
Excavation	8000 CY @ $7.5		60,000
SUBTOTAL: C-2a		$	60,000

b. DRAINAGE				
1) Side Drain Pipe	236	LF @ $27	$	6,372
2) Storm drain pipe	71	LF @ $44	$	3,124
3) Con,Maint,Rem Temp Drn Str	1	EA @ $20500	$	20,500
4) Adjust CB's to grade	2	EA @ $1050	$	2,100
5) Flared End Sections	6	EA @ $320	$	1,920
6) Safety End Sections	1	EA @ $550	$	550
7) Perforated Underdrain		LF @ $6	$	-
8)Temporary Pipe Slope Drain	400	LF @ $10	$	4,000
SUBTOTAL: C-2.c			$	38,566
SUBTOTAL: C-2			$	**98,566**
3. BASE AND PAVING:				
a. AGGREGATE BASE CRS	4610	TN @ $13	$	59,930
b. ASPHALT PAVING (Mainline & Cross-Roads):				
19 mm Superpave	1018	Tons @ $37	$	37,666
25 mm Superpave	2606	Tons @ $33	$	85,998
9.5 mm Superpave	625	Tons @ $37	$	23,125
Tack Coat	925	Gallons @ $1	$	925
SUBTOTAL: C-3.b			$	147,714
c. ASPHALT PAVING (Onsite detour):				
19 mm Superpave		Tons @ $37	$	-
25 mm Superpave		Tons @ $33	$	-
9.5 mm Superpave		Tons @ $37	$	-
Tack Coat		Gallons @ $1	$	-
d. AGGREGATE BASE CRS		TN @ $13	$	-
SUBTOTAL: C-3.c			$	-
e. OTHER (Leveling,Milling, etc.)			$	1000
f. AGGREGATE SURFACE COURSE		Tons @ $19	$	-
SUBTOTAL: C-3			$	**208,644**

4. EROSION CONTROL (Mainline)					
a. SILT FENCE					
1. TYPE A		5300	LF @ $3.5	$	18,550
2. TYPE B			LF @ $2.6	$	-
3. TYPE C		1570	LF @ $5.3	$	8,321
b. CNST, MNT, REM SILT TRPS		3	EA @ $300	$	900
c. RIP RAP		1300	SF @ $30	$	39,000
d. PLASTIC FILTER FABRIC		1300	SF @ $5.8	$	7,540
e. PERMANENT SOIL REINFORCINC		3283	SY @ $5	$	16,415
f. MULCH		75	TN @ $433		32,475
g. PERMANENT GRASS		148	LB @ $42		6,216
h. TEMPORARY GRASS		12	LB @ $33		396
	SUBTOTAL: C-4			$	**129,813**
5. TRAFFIC CONTROL				$	30000
CLEARING&GRUBBING					10000
	SUBTOTAL: C-5			$	**40,000**
6. MISCELLANEOUS:					
a. LIGHTING				$	10500
b. SIGNING - MARKING				$	2000
c. GUARDRAIL					
W Beam		785	LF @ $12	$	9,420
T Beam		83	LF @ $40	$	3,320
Anchors	TYPE 12	2	@ $1300	$	2,600
	TYPE 1	2	@ $400	$	800
	SUBTOTAL: C-6.c			$	16,140
d. SIDEWALK		137	SY @ $21	$	2,877
e. MEDIAN / SIDE BARRIER	Precast	1550	LF @ $25	$	38,750
f. APPROACH SLABS		387	SY @ $90	$	34,830
g. DRIVEWAY CONCRETE		400	SY @ $23	$	9,200
h. CONCRETE MEDIAN		111	SY @ $36	$	3,996
i. CURB AND GUTTER		490	LF @ $15	$	7,350
j. CURB CUT/WHEELCHAIR RAMP		2	EA @ $600	$	1,200
	SUBTOTAL: C-6			$	**126,843**
7. SPECIAL FEATURES					
	SUBTOTAL: C-7			$	-

SUMMARY		
A. RIGHT-OF-WAY	$	407,925
B. REIMBURSABLE UTILITIES	$	25,000
C. CONSTRUCTION		
1. MAJOR STRUCTURES	$	845,250
2. GRADING AND DRAINAGE	$	98,566
3. BASE AND PAVING	$	208,644
4. EROSION CONTROL	$	129,813
5. LUMP ITEMS	$	40,000
6. MISCELLANEOUS	$	126,843
7. SPECIAL FEATURES	$	-
SUBTOTAL CONSTRUCTION COST	$	1,449,116
INFLATION (5% PER YEAR)	$	492,838
NUMBER OF YEARS 6		
E. & C. (10%)	$	194,195
TOTAL CONSTRUCTION COST	$	**2,136,149**
GRAND TOTAL PROJECT COST	$	**2,569,074**

PRELIMINARY COST ESTIMATE FOR BR FUNDING COMPARISON

BRIDGE WIDENING ONLY WITH ON SITE DETOUR (NO IMPROVEMENT TO VERTICAL GEOMETRY)

PROJECT NUMBER: BRST-1891(30) COUNTY: Gwinnett

DATE: June 10,2002 ESTIMATED LETTING DATE: 2009

PREPARED BY: Transportation Systems Design, Inc PROJECT LENGTH: 0.35 Miles

( ) PROGRAMMING PROCESS (X) CONCEPT DEVELOPMENT ( ) DURING PROJECT DEV.

PROJECT COST			
A. RIGHT-OF-WAY:			
1. PROPERTY (LAND & EASEMENT) (Costs ranging $3.50-$5.00/SF)		$	368650
2. DISPLACEMENTS; RES: 0, BUS: 0, M.H.: 0		$	
3. OTHER COST (ADM./COST, INFLATION -- R/W DATE FOR PROJECT IS 2004)		$	37,787
SUBTOTAL: A		$	**406,437**
B. REIMBURSABLE UTILITIES:			
1. RAILROAD		$	
2. TRANSMISSION LINES		$	
3. SERVICES (utility poles)		$	25000
SUBTOTAL: B		$	**25,000**
C. CONSTRUCTION:			
1. MAJOR STRUCTURES			
a. BRIDGES (75' X 34'X $145) -- 14' TURN LN + 2 SHLDRS			
		$	369750
		$	
SUBTOTAL: C-1.a		$	369,750
b. OTHER			
		$	-
		$	
SUBTOTAL: C-1		$	**369,750**
2. GRADING AND DRAINAGE:			
a. EARTHWORK (Mainline)			
Borrow	CY @ $7.5	$	-
Excavation	8000 CY @ $7.5		60,000
SUBTOTAL: C-2a		$	60,000

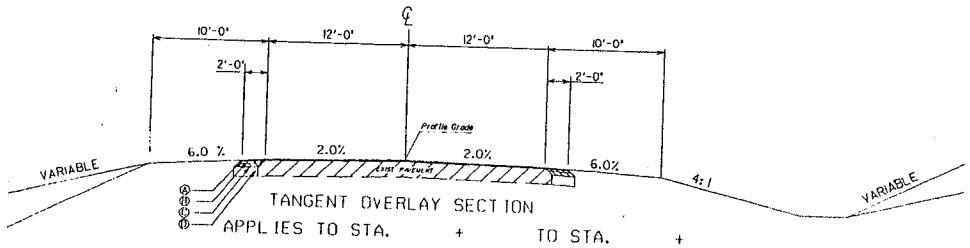
b. DRAINAGE				
1) Side Drain Pipe	108	LF @ $27	$	2,916
2) Storm drain pipe		LF @ $44	$	-
3) Longitudinal System (incl. CB's)		LF @ $0	$	-
4) Flared End Sections	6	EA @ $275	$	1,650
5) Perforated Underdrain		LF @ $6	$	-
6)Temporary Pipe Slope Drain	400	LF @ $10	$	4,000
SUBTOTAL: C-2.c			$	8,566
SUBTOTAL: C-2			$	**68,566**
3. BASE AND PAVING:				
a. AGGREGATE BASE CRS	1238	TN @ $13	$	16,094
b. ASPHALT PAVING (Mainline & Cross-Roads):				
19 mm Superpave	665	Tons @ $37	$	24,605
25 mm Superpave	605	Tons @ $33	$	19,965
9.5 mm Superpave	457	Tons @ $37	$	16,909
Tack Coat	538	Gallons @ $1	$	538
SUBTOTAL: C-3.b			$	62,017
c. ASPHALT PAVING (Onsite detour):				
19 mm Superpave	411	Tons @ $37	$	15,207
25 mm Superpave	1232	Tons @ $33	$	40,656
9.5 mm Superpave	252	Tons @ $37	$	9,324
Tack Coat	392	Gallons @ $1	$	392
d. AGGREGATE BASE CRS	2520	TN @ $13	$	32,760
SUBTOTAL: C-3.c			$	98,339
e. OTHER (Leveling,Milling, etc.)			$	1000
f. AGGREGATE SURFACE COURSE		Tons @ $19	$	-
SUBTOTAL: C-3			$	**177,450**

4. EROSION CONTROL (Mainline & Detour)					
a. SILT FENCE					
1. TYPE A		5300	LF @ $3.5	$	18,550
2. TYPE B			LF @ $2.6	$	-
3. TYPE C		2400	LF @ $5.3	$	12,720
				$	
b. RIP RAP		1200	SF @ $30	$	36,000
c. PLASTIC FILTER FABRIC		1200	SF @ $5.8	$	6,960
d. PERMANENT SOIL REINFORCIN(		6566	SY @ $5	$	32,830
e. MULCH		126.4	TN @ $433		54,731
f. PERMANENT GRASS		247.6	LB @ $42		10,399
h. TEMPORARY GRASS		26	LB @ $33		858
		SUBTOTAL: C-4		$	**173,048**
5. TRAFFIC CONTROL				$	30000
CLEARING&GRUBBING					10000
		SUBTOTAL: C-5		$	**40,000**
6. MISCELLANEOUS:					
a. LIGHTING				$	10500
b. SIGNING - MARKING				$	2000
c. GUARDRAIL					
W Beam		2000	LF @ $12	$	24,000
T Beam		240	LF @ $40	$	9,600
Anchors	TYPE 12	4	@ $1600	$	6,400
	TYPE 1	4	@ $450	$	1,800
		SUBTOTAL: C-6.c		$	41,800
d. SIDEWALK				$	
e. MEDIAN / SIDE BARRIER	TYPE 3	250		$	5250
f. APPROACH SLABS		681	SY @ $90	$	61,290
g. REMOVAL					
Bridges				$	50000
		SUBTOTAL: C-6.g		$	50,000
		SUBTOTAL: C-6		$	**170,840**
7. SPECIAL FEATURES					
		SUBTOTAL: C-7		$	-

SUMMARY		
A. RIGHT-OF-WAY	$	406,437
B. REIMBURSABLE UTILITIES	$	25,000
C. CONSTRUCTION		
1. MAJOR STRUCTURES	$	369,750
2. GRADING AND DRAINAGE	$	68,566
3. BASE AND PAVING	$	177,450
4. EROSION CONTROL	$	173,048
5. LUMP ITEMS	$	40,000
6. MISCELLANEOUS	$	170,840
7. SPECIAL FEATURES	$	-
SUBTOTAL CONSTRUCTION COST	$	999,654
INFLATION (5% PER YEAR)	$	406,960
NUMBER OF YEARS 7		
E. & C. (10%)	$	140,661
TOTAL CONSTRUCTION COST	$	**1,547,276**
GRAND TOTAL PROJECT COST	$	**1,978,712**

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.	BRST-189-1(30)		

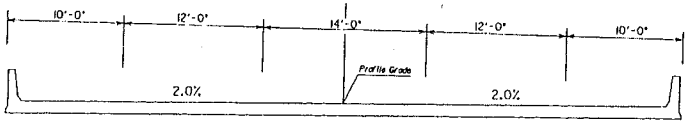
TS-1



TANGENT OVERLAY SECTION

APPLIES TO STA. + TO STA. +

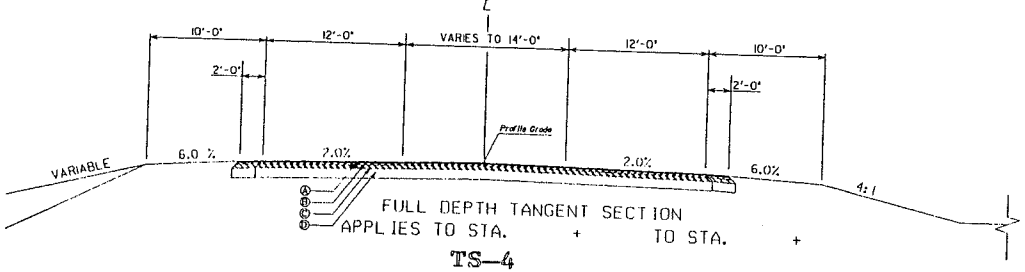
TS-2



BRIDGE SECTION

APPLIES TO STA. + TO STA. +

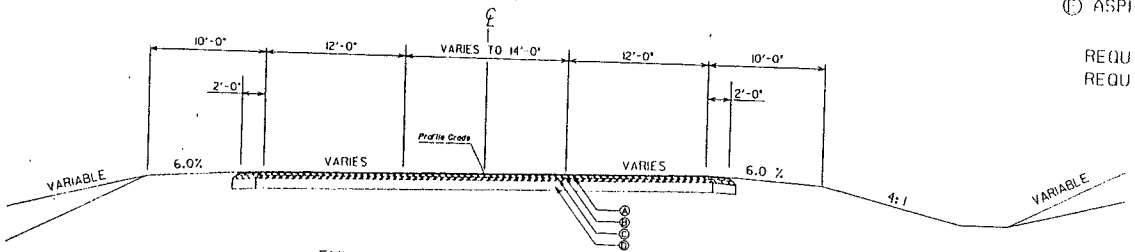
TS-3



FULL DEPTH TANGENT SECTION

APPLIES TO STA. + TO STA. +

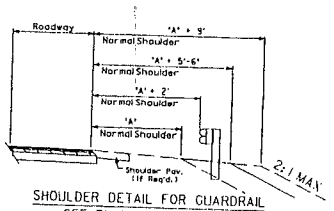
TS-4



FULL DEPTH SUPERELEVATED SECTION

APPLIES TO STA. + TO STA. +

SLOPE CONTROLS		
SLOPE	CUT	FILL
4:1	0-4'	0-10'
3:1	4'-6'	--
2:1	OVER 10'	OVER 10'



SHOULDER DETAIL FOR GUARDRAIL

SEE PLAN FOR LOCATION

SEE GA STD 4051 OR 4052 FOR DETAILS

NOT TO SCALE

ALLOWABLE RANGES TABLE

FOR THIS PROJECT, CROSS SLOPES THAT ARE ADJUSTED TO 'BEST FIT' EXISTING PAVEMENT SLOPES ARE SUBJECT TO THE FOLLOWING LIMITS:

A. NORMAL CROWN

SECTION WITH GRADES 0.5% OR GREATER	SECTION WITH GRADES LESS THAN 0.5%
0.0150 FT/FT - MINIMUM 0.0208 FT/FT - DESIRABLE 0.0250 FT/FT - MAXIMUM	0.0156 FT/FT - MINIMUM 0.0208 FT/FT - DESIRABLE 0.0300 FT/FT - MAXIMUM

B. SUPERELEVATION RATE

S.E. RATE SHOWN ON PLANS OR SL RATE EXISTING IN FIELD, WHICHEVER IS GREATER.

C. SUPERELEVATION TRANSITION LENGTH (LENGTH FROM FLAT POINT TO FULL SE)

	RATE OF CHANGE	CORRESPONDING DIFFERENCE IN GRADE BETWEEN PIVOT POINT AND EDGE OF PAVEMENT
MINIMUM	1:150	0.67%
DESIRABLE	1:200	0.50%
MAXIMUM	1:300	0.33%

LENGTH SHALL BE SET TO AVOID CREATING A FLAT GUTTER GRADE ON LOW SIDE AND TO AVOID FLAT CROSS SLOPES AT OR NEAR THE LOW POINT OF VERTICAL CURVES.

D. POSITIONING OF SUPERELEVATION TRANSITION LENGTH ON SIMPLE CURVES

50% OF TRANSITION INSIDE CURVE - MAXIMUM
33% OF TRANSITION INSIDE CURVE - DESIRABLE
20% OF TRANSITION INSIDE CURVE - MINIMUM

NOTE: CROWN WIPE-OUT SHALL BE AT THE SAME RATE AS THE SE TRANSITION.

E. SMOOTHING OF BREAKS IN EDGE PROFILE AT BEGIN AND END OF TRANSITION SHALL BE ACCOMPLISHED BY VERTICAL CURVE WITH A MINIMUM LENGTH (IN FEET) EQUAL TO THE SPEED DESIGN (IN MPH).

REQUIRED PAVEMENT

Ⓐ 12.5 mm ASPHALTIC CONCRETE SUPERPAVE - 135 LB/SY

Ⓑ 19 mm RECYCLED ASPHALTIC CONCRETE SUPERPAVE - 220 LB/SY

Ⓒ GRADED AGGREGATE BASE, 12" (ALTERNATE 1).

Ⓓ 25 mm RECYCLED ASPHALTIC CONCRETE SUPERPAVE - 550 LB/SY (ALTERNATE 2)

Ⓔ ASPHALTIC CONCRETE LEVELING, AS REQ'D

REQUIRED SUPERPAVE MIX DESIGN: LEVEL B FOR ROADWAY SURFACE
REQUIRED SUPERPAVE MIX DESIGN: LEVEL A FOR SHOULDER SURFACE

NOT TO SCALE

TSD
TRANSPORTATION SYSTEMS DESIGN, INC.
ENGINEERS & SURVEYORS
5591 CHAMBLEE DUNWOODY ROAD
BLDG. 1361, SUITE 100
ATLANTA, GA. 30338
(770) 396-4077

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
OFFICE OF CONSULTANT TASK FORCE

DATE	REVISIONS	DATE	REVISIONS	DATE	REVISIONS

GEORGIA
DEPARTMENT OF TRANSPORTATION
CONCEPT TYPICAL SECTIONS
PROJECT BRST-189-1(30)
COUNTY: GWINNETT
DATE SH OF

BRIDGE INVENTORY DATA LISTING GEORGIA DEPARTMENT OF TRANSPORTATION

Structure ID: 135-0023-0 **Gwinnett County** SUFF. RATING: 59.7

Location & Geography

* Structure I.D. No.: 135-0023-0
200 Bridge Information: 06

* 6A Feature Int.: SINGLETON CREEK
* 6B Critical Bridge: 0
* 7A Route Number Carried: SR00120
* 7B Facility Carried: DULUTH HIGHWAY
* 9 Location: 1.5 MI E OF DULUTH
2 DOT District: 1
207 Year Photo: 1998

* 91 Inspection Frequency: 24 Date: 12/02/1999
92A Fract Crit Insp Freq: 0 00 Date: 0000
92B Underwater Insp Freq: 0 00 Date: 0000
92C Other Spc. Insp Freq: 0 00 Date: 0000

* 4 Place Code: 00000

* 5 Inventory Route (O/U): 1
Type: 3
Designator: 1
Number: 00120
Direction: 0

* 16 Latitude: 33-58.6
* 17 Longitude: 84 -06.6

98 Border Bridge: 000 %Shared: 00
99 ID Number: 000000000000000

* 100 Defense Highway: 0
* 101 Parallel Structure: N
* 102 Direction of Traffic: 2
264 Road Inventory Mile Post: 005.13

* 208 Inspection Area: 07 Initials: DAS

* Location I.D. No: 135-00120D-005.13E
* XReferen I.D. No: 000-000000-000.000

* 104 Highway System: 0
* 26 Functional Classification: 16
* 204 Federal Route Type: F No: 189-1
* 110 Truck Route: 0
206 School Bus Route: 1
217 Benchmark Elevation: 0.00
218 Datum: 0
* 19 Bypass Length: 2
* 20 Toll: 3
* 21 Maintenance: 01
* 22 Owner: 01
* 31 Design Load: 2
37 Historical Significance: 5
205 Congressional District: 04
* 27 Year Constructed: 1938
106 Year Reconstructed: 0000
33 Bridge Median: 0
34 Skew: 19
35 Structure Flared: 0
38 Navigation Control: 0
213 Special Steel Design: 0
267 Type of Paint: 1

* 42 Type Service On: 1
Under: 5
214 Movable Bridge: 00
203 Type Bridge: A-O-M-O
259 Pile Encasement: 3
* 43 Structure Type Main: 4 02
45 No. Spans Main: 002
44 Structure Type Appr: 3 3
46 No. Spans Appr: 0001
226 Bridge Curve Horz: 0 Vert: 0
111 Pier Protection: 0
107 Deck Structure Type: 1

108 Wearing Surface Type: 6
Membrane: 0
Protection: 8

Signs & Attachments

223 Expansion Joint Type: 02
242 Deck Drains: 1

243 Parapet Location: 0
Height: 0
Width: 0

238 Curb: 0.7 1
239 Handrail: 1 1
* 240 Median Barrier Rail: 0

241 Bridge Median Height: 0
Width: 0

* 230 Guardrail Loc Dir Rear: 3
Fwrd: 3
Oppo Dir Rear: 0
Fwrd: 0

244 Approach Slab: 0
224 Retaining Wall: 0

233 Posted Speed Limit: 50
236 Warning Sign: 1
234 Delineator: 1
235 Hazard Boards: 1

237 Utilities Gas: 00
Water: 00
Electric: 00
Telephone: 00
Sewer: 00

247 Lighting Street: 0
Navigation: 0
Aerial: 0

* 248 County Continuity No: 00

Report Date: 08/06/2001

RIDGE INVENTORY DATA LISTING GEOR A DEPARTMENT OF TRANSPORTATION

Structure ID: 135-0023-0 **Gwinnett County** SUFF. RATING: 59.7

Programming Data

201	Project No:	F-2661-B
202	Plans Available:	1
249	Prop. Proj No:	BRST-189-1 (30)
250	Approval Status:	6021
251	P.I. No:	132986
252	Contract Date:	02/01/2004
260	Seismic No:	00000
75	Type Work:	34 1
94	Bridge Imp. Cost:	$ 173
95	Roadway Imp. Cost:	$ 380
96	Total Imp. Cost:	$ 634
76	Imp. Length:	001397
97	Imp. Year:	1990
114	Future ADT:	033900 Year: 2019

Hydraulic Data

215	Waterway Data	
	Highwater Elev:	0000.0 Year: 0000
	Flood Elev:	0000.0 Freq: 00
	Avg. Streambed Elev:	0000.0
	Drainage Area:	00000
	Area of Opening:	000000
113	Scour Critical:	6
216	Water Depth:	01.3 Br Height: 11.9
222	Slope Protection:	0
221	Spur Dikes Rear:	0 Fwrd: 0
219	Fender System:	0
220	Dolphin:	0
223	Culvert Cover:	000
	Type:	0
	No Barrels:	0
	Width:	0.0
	Height:	0.0
	Length:	0
	Apron:	0
* 265	U/W Insp. Area:	0 Diver: ZZZ

* Location I.D. No: 135-00120D-005.13E
* XReferen I.D. No: 000-000000-000.000

Measurements

* 29	ADT:	022600 Year: 1999
109	% Trucks:	9
* 28	Lanes On:	02 Under: 00
210	No. Tracks On:	00 Under: 00
* 48	Max. Span Length:	0025
* 49	Structure Length:	75
51	Br. Rdwy. Width:	23.8
52	Deck Width:	26.8
* 47	Tot. Horz. Cl:	23.8
50	Curb/Sdewlk Width:	0.0/0.0
32	Approach Rdwy Width:	024
* 229	Shlder Width:	
	Rear Lt: 4.4	Type: 8 Rt: 5.3
	Fwrd Lt: 5.0	Type: 8 Rt: 4.0
	Pvment Width:	
	Rear: 23.9	Type: 2
	Fwrd: 23.9	Type: 2
	Intersection Rear: 0	Fwrd: 0
36	Safety Features Br. Rail:	2
	Transition:	2
	App. G. Rail:	2
	App. Rail End:	2
53	Minimum Cl. Over:	99' 99"
	Under: N	00' 00"
* 228	Min. Vert. Cl	
	Act. Odm. Dir:	99' 99"
	Oppo. Dir:	99' 99"
	Posted Odm. Dir:	00' 00"
	Oppo. Dir:	00' 00"
55	Lateral Undercl. Rt:	N 99.9
56	Lateral Undercl. Lt:	0.0
* 10	Max Min Vert Cl:	99' 99" Dir: 0
39	Nav Vert Cl: 000	Horz: 0000
116	Nav Vert Cl Closed:	000
245	Deck Thickness Main:	7.0
	Deck Thick Approach:	7.0
246	Overlay Thickness:	5.0
211	Tons Structural Steel:	0.0
212	Year Last Painted:	Sup: 1988 Sub: 0000

Ratings

66	Inventory Type: 2	Rating: 22
64	Operating Type: 2	Rating: 35
231	Calculated Loads	
	H-Modified:	20 0
	HS-Modified:	25 0
	Type 3:	26 0
	Type 3s2:	40 0
	Timber:	35 0
	Piggyback:	40 0
261	H Inventory Rating:	15
262	H Operating Rating:	21
67	Structural Evaluation:	5
58	Deck Condition:	7
59	Superstructure Condition:	7
* 227	Collision Damage:	0
60A	Substructure Condition:	7
60B	Scour Condition:	8
60C	Underwater Condition:	N
71	Waterway Adequacy:	8
61	Channel Protection Cond:	8
68	Deck Geometry:	2
69	UnderClr. Horz/Vert:	N
72	Appr. Alignment:	6
62	Culvert:	N

Posting Data

70	Bridge Posting Required:	5
41	Struct Open, Posted, Cl:	A
* 103	Temporary Structure:	0
232	Posted Loads H-Modified:	00
	HS-Modified:	00
	Type 3:	00
	Type 3S2:	00
	Timber:	00
	Piggyback:	00
253	Notification Date:	0000
253	Fed Notify Date:	0000 0

TRANSPORTATION SYSTEMS DESIGN, INC.

June 5, 2002

Meeting Minutes

RE: **BRST-189-1 (30), Gwinnett County**
PI No. 132986
TSD No. 0108.05 WO #2
Subject: **Concept Meeting**
Location: **GDOT District 1**

Present:

Otis Clark	OCD	404-463-6265
Henry O'Kelley	GDOT Utilities	770-532-5510
Johnny Emmett	GDOT Dist. 1	770-718-5024
Todd Long	GDOT Dist. 1	770-532-9520
Sev Burhalter	BellSouth	770-493-2006
Julie Wilson	GDOT Dist. 1	770-532-5582
Margie Pozin	TSD	770-396-4877
Anna Shmukler	TSD	770-396-4877

Minutes:

Margie opened meeting with brief description of the project. She listed alternatives which were considered during concept preparation.

Otis raised question concerning construction funding of this project. Since bridge rating exceeds 50, funding will be split between State and Federal funds. TSD will have to provide separate cost estimate for construction of shoulder widening and 14' left turn lane with on-site detour. This will be compared to the cost estimate for replacement to determine how much BR funding is available for this project. If an onsite bridge widening will require corrections to inadequate existing geometry (vertical), this must be included in the estimate.

Todd noted that the Need and Purpose statement should be revised to reflect a geometrically and structurally deficient bridge, rather than just structurally deficient.

Julie asked that we include the word "existing" when describing the right-of-way widening to 100' at the bridge in the Need and Purpose statement.

It was mentioned that new requirements may be in effect for stream buffers. Though we need to further investigate this, construction limits are thought to now be at least 25' from top of stream banks. The previous buffer was 10'.

We should be receiving traffic counts for the justification of the 14' left turn lane to Northmont Parkway very shortly. These counts will also be attached to the Concept Report.

Traffic counts in the body of the Concept Report will be revised to include current(2001), base(2009) and design(2029) years.

Since this is considered a minor project, time saving procedures are appropriate and page 6 of the Concept Report will be revised to reflect this.

Otis noted that LGPA with Gwinnett County was requested on 7-19-99, but it was not signed. He asked that we revise our concept report accordingly.

Sev Burkhalter of BellSouth informed us that Bell South has a 9-way 4" plastic encased duct system crossing Singleton Creek. Since duct system is encased, he assumes it is located underground and in the creek. He will identify exact location of this duct and send location, depth and size of it to TSD. Mr. Burkhalter asked designer to consider avoiding this duct. He believes the bridge footings may be of concern.

Todd asked if TSD considered placement of Box Culvert instead of bridge. Margie and Anna will look into this. If drainage area is less then 20 sq. miles, TSD will evaluate viability of box culvert. This alternate will be added to the Concept Report once it has been considered.

Johnny asked to reevaluate traffic control estimate. $30,000 is more in-line with existing practices. He also asked to add quantities for Type III Barriers. (250')

Johnny also asked that we revise our typical section pavement design. (This may slightly alter our cost estimate.) He recommended we revise pavement course A to be 12.5 mm superpave at 165 psy rather than 9.5mm at 135 psy, pavement course C to be 12" GAB rather than 6", and pavement course D to be 550 psy rather than 660psy.

The memo from Buddy Gratton, PE to James Buchan, PE regarding the replacement of this bridge with a sufficiency rating greater than 50 is to be included as an attachment to the Concept Report. The Need and Purpose statement will be revised to reflect the content of this memo.

Meeting was adjourned.

☐ 5591 Chamblee Dunwoody Road, Bldg. 1360, Suite 100, Atlanta, GA 30338 • (770) 396-4877 Fax: (770) 551-9427 • tsd@tsdengineers.com
☐ 471 Scenic Highway, Lawrenceville, GA 30045 • (770) 338-1147 Fax: (770) 338-1353 • tsd_g@tsdengineers.com

NOTICE OF LOCATION AND DESIGN APPROVAL

BRST-189-1(30), Gwinnett County
P. I. NUMBER 132986

Notice is hereby given in compliance with Georgia Code 22-2-109 that the Georgia Department of Transportation has approved the Location and Design of this project.

The date of location approval is FEBRUARY 11, 2003.

The project is located in Gwinnett County on SR 120 at Singleton Creek. The project is located in Land District 7 in Land Lots 117-120.

The project consists of the replacement of the structurally deficient bridge on SR 120 over Singleton Creek. The proposed bridge structure will be built on new alignment to the south of the existing bridge.

Drawings or maps or plats of the proposed project, as approved, are on file and are available for public inspection at the Georgia Department of Transportation:

Mr. Randy Davis – Area 5 Engineer
Email address: randall.davis@dot.state.ga.us
892 Hi-Hope Road
Lawrenceville, Georgia 30043
770-339-2308

Any interested party may obtain a copy of the drawings or maps or plats or portions thereof by paying a nominal fee and requesting in writing to:

James B. Buchan, P.E.
Office of Consultant Design
Ben.Buchan@dot.state.ga.us
No. 2 Capital Square
Atlanta, Georgia 30334
404-463-6265

Any written request or communication in reference to this project or notice MUST include the Project and P. I. Numbers as noted at the top of this notice.

Department of Transportation
State of Georgia

INTERDEPARTMENT CORRESPONDENCE

FILE BRST-189-1(30) Gwinnett
P.I. 132986

OFFICE Environment/ Location

DATE September 10, 2001

FROM Harvey D. Keepler, State Environmental/ Location Engineer

TO Jim Chambers, P.E., State Consultant Design Engineer
Attn: Ted Cashin

SUBJECT SR 120/Duluth Highway @ Singleton Creek

We are furnishing estimated traffic assignments for the above project as follows:

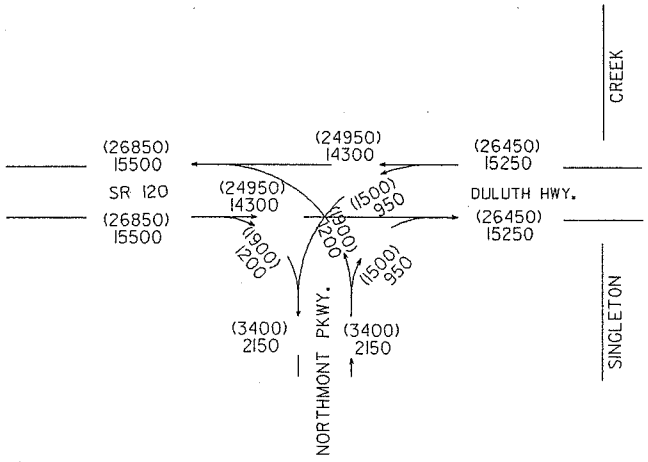
Existing 2001 ADT = 23500
2009 ADT = 28650
2029 ADT = 49500
K = 10%
D = 60%
T = 4%
24 HR T = 6%
SU = 5%
COMB = 1%

If you have any questions concerning this information please contact Teresa Williamson at (404)699-4458

HDK:TJW

GWINNETT COUNTY

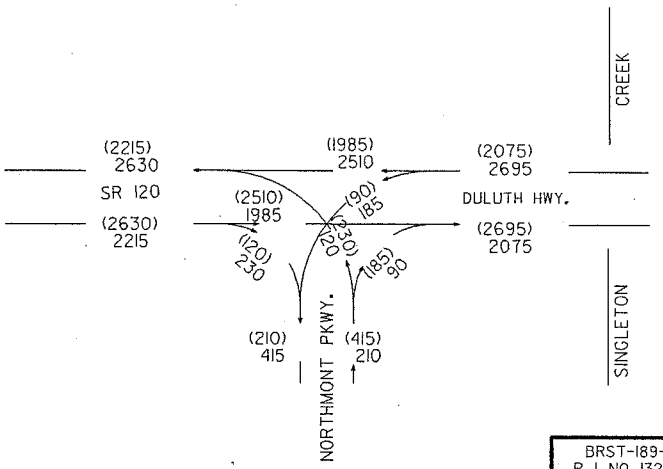
GEORGIA DEPARTMENT OF TRANSPORTATION
OFFICE OF ENVIRONMENT/LOCATION



2029 ADT = (000)
2009 ADT = 000

N

2029 PM DHV = (000)
2029 AM DHV = 000



BRST-189-1(30)
P. I. NO. 132986
GWINNETT COUNTY

SR 120 @
NORTHMONT PKWY.

T = 4%
24 HR. T = 6%
S. U. = 5%
COMB. = 1%

TJW
09/02

J. TOM COLEMAN, JR.
COMMISSIONER
(404) 656-5206

FRANK L. DANCHETZ
CHIEF ENGINEER
(404) 656-5277

Department of Transportation
State of Georgia

HAROLD E. LINNENKOHL
DEPUTY COMMISSIONER
(404) 656-5212

EARL MAHFUZ
TREASURER
(404) 656-5224

INTERDEPARTMENT CORRESPONDENCE

April 24, 2002

FROM: Buddy Gratton, P.E., State Maintenance Engineer

TO: James B. Buchan, P.E., State Consultant Design Engineer
Attn: Ted Cashin

SUBJECT: Bridge Replacement

BRST-189-1 (30) / Gwinnett
Structure ID 135-0023-0
Location ID 135-00120D-005.13E
SR 120 over Singleton Creek

This bridge was built in 1938 and consists of concrete bents, steel beam superstructure, and a concrete deck. The original design load capacity is H-15. The sufficiency rating on the structure is 55.9, and the bridge is classified as Functionally Obsolete and requires widening. However, in accordance with DOT policy 2405-1, we recommend that this bridge be replaced though due to unacceptable load capacity. Due to this criteria, no additional cost analysis or coring by the lab will be required. This bridge does not currently qualify for federal replacement BR funding but does qualify for federal bridge widening funds which can be used toward replacement up to the estimated cost of widening. The remaining funds would have to come from another funding source.

If further information is required, please contact Brian Summers at (404) 635-8179.

BG/BKS

cc: Percy Middlebrooks

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
OFFICE OF CONSULTANT DESIGN

PROJECT CONCEPT REPORT

Project Number: BRST-189-1(30)
County: Gwinnett
P.I. Number: 132986

Federal Route Number: N/A
State Route Number: 120

Recommendation for approval:

DATE 7/23/02 _____ Project Manager

DATE 8/5/02 _____ State Consultant Design Engineer

The concept as presented herein and submitted for approval is consistent with that which is included in the Regional Transportation Plan (RTP) and/or the State Transportation Improvement Program (STIP).

8/7/02 _____ State Transportation Planning Administrator
DATE

_____ _____
DATE Office of Financial Management Administrator

_____ _____
DATE State Environmental / Location Engineer

_____ _____
DATE State Traffic Safety and Design Engineer

_____ _____
DATE District Engineer

_____ _____
DATE Project Review Engineer

_____ _____
DATE State Bridge & Structural Design Engineer

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
OFFICE OF CONSULTANT DESIGN

PROJECT CONCEPT REPORT

Project Number: BRST-189-1(30)
County: Gwinnett
P.I. Number: 132986

Federal Route Number: N/A
State Route Number: 120

Recommendation for approval:

DATE 7/23/02 — Project Manager

DATE 8/5/02 — State Consultant Design Engineer

The concept as presented herein and submitted for approval is consistent with that which is included in the Regional Transportation Plan (RTP) and/or the State Transportation Improvement Program (STIP).

DATE — State Transportation Planning Administrator

DATE — Office of Financial Management Administrator

DATE — State Environmental / Location Engineer

DATE — State Traffic Safety and Design Engineer

DATE — District Engineer

DATE — Project Review Engineer

8/12/02 — State Bridge & Structural Design Engineer
DATE

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
OFFICE OF CONSULTANT DESIGN

PROJECT CONCEPT REPORT

Project Number: BRST-189-1(30)
County: Gwinnett
P.I. Number: 132986

Federal Route Number: N/A
State Route Number: 120

Recommendation for approval:

DATE 7/23/02 — Project Manager

DATE 8/5/02 — State Consultant Design Engineer

The concept as presented herein and submitted for approval is consistent with that which is included in the Regional Transportation Plan (RTP) and/or the State Transportation Improvement Program (STIP).

DATE — State Transportation Planning Administrator

DATE — Office of Financial Management Administrator

DATE — State Environmental / Location Engineer

DATE — State Traffic Safety and Design Engineer

DATE — District Engineer

9/3/02 — Project Review Engineer

DATE — State Bridge & Structural Design Engineer

TSD

TRANSPORTATION SYSTEMS DESIGN, INC.

September 23, 2002

Georgia Department of Transportation
Office of Consultant Design
No 2 Capitol Square, SW
Atlanta, GA 30334-1002

Attn: Otis Clark
Design Group Manager

Reference: BRST-189-1(30) Gwinnett
PI No. 132986
TSD Project No. 0108.05, WO 2

Dear Otis,

We received comments from David Mulling's office concerning Concept Report for this project.

1. There is a reference to Northmont Parkway being the same road as McDaniel Road. Those are two different roads. McDaniel Road is located further to the west of our project and is definitely outside of the project limits. Northmont Parkway, on the other hand, is within project limits and intersects SR 120 at 98 degree angle (verified by field survey). This road was built by Gwinnett County just a few years ago and is well aligned and in a good working condition (see attached map). In respect to 14' extra width of the bridge, the centerline of Northmont parkway is only 340 feet away from the edge of the proposed bridge. This will not provide enough room for the left-turn lane storage and taper that is anticipated for this design.
2. We considered widening the existing bridge, but it cannot be done because the roadway profile has to be raised at least 7 (seven) feet in order to comply with the most current AASHTO requirements for a 55 MPH speed design. Due to this alone, this option is not applicable and was not listed.
3. The culvert option was also investigated and it revealed that a culvert will not meet GDOT criteria for "Urbanized flow" and will not meet FEMA criteria at all.

Consequently, after the comments were made, the scoring sheet showed our score to be 90 for the judgment category. I feel this score is not justified. Could you please forward my response to Mr. Mulling, as I would like to ask him to revisit our score.

If you have any questions, don't hesitate to call me at 770-396-4877.

Sincerely,

Anna Shmukler

Anna Shmukler, PE

Cc: Ben Buchan, State Consultant Design Engineer
Meg Pirkle, Assistant Director of Preconstruction
David Mulling, Project Review Engineer

☐ 5591 Chamblee Dunwoody Road, Bldg. 1360, Suite 100, Atlanta, GA 30338 • (770) 396-4877
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